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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,722	03/24/2004	Jinichi Hiyama	44471/298741	4425

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EXAMINER

DUONG, THO V

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/807,722	HIYAMA ET AL. <i>CH</i>	
	Examiner	Art Unit	
	Tho v Duong	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 7-9 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse of species III (confirmed with the applicant to be species of figure 12) in the reply filed on 12/16/2004.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation of "the tube holding wall portion provided in the second separated body and holds the flat tube" is not supported in the specification. It appears that the holding wall portion provided in the first separated body instead.

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Claims 1-6 are further rejected as can be best understood by the examiner in which the tube holding wall portion provided in the first separated body.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bertva et al. (US 5,450,896). Bertva discloses (figures 1-4) a header tank for a heat exchanger in which a plurality of flat tubes (14) are communicated and connected to at least a pair of header tanks so as to form a multiple stages, comprising a pipe (12) formed by combining a first separated body (26) and a second separated body (28); a closing member (22) for closing opening portions in both end of the pipe; a tube holding wall portion (32) provided in the first separated body and holds the flat tube; a pair of straight portions (38) protruded from the tube holding wall portion in an approximately orthogonal direction and formed along both ends in a width direction of the tube; wherein the holding wall portion (32) and the pair of straight portions are formed in a C-shaped cross sectional shape; the second separated body further comprises a main body portion (48) closing an opening portion of the first separated body, abutment portions (70) provided in both ends of the main body portions and abutted on the leading end surface of the straight portion in the first separated body; joint projections (54) protruded from the main body portion and bonded to the inner peripheral surface of the leading end portion in the straight portion; wherein the main body portion is formed by connecting the abutment portions to each other in an

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approximately linear shape so as to be approximately orthogonal to the longitudinal direction of the tube. Bertva further discloses (column 4, lines 19-23) that the first and second separated bodies are fixed with brazing material. Regarding claim 6, the method of forming the device “wherein the first and second bodies are fixed ..toward the joint projections of the second separated body” is not germane to the issue of patentability of the device itself. “Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the pipe in product-by-by process claim is the same as or obvious from the pipe of the prior art. Therefore, the claim is unpatentable even though the prior pipe was made by a different process.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Calleson (US 5,152,339). Calleson discloses (figures 7-8) the claimed invention wherein the main body portion (190) is in an approximately linear shape so as to be approximately orthogonal to the longitudinal direction of the tube; abutment portions (140) provided in both ends of the main body portion; joint projections (134) protruded from the main body and bonded to the inner peripheral surface of the leading end portion in the straight portion (164); the inner peripheral surface of the main body portion is formed in a circular curved surface connecting the pair of joint projections to each other. Regarding claim 2, Calleson further discloses an embodiment in figure 4a that the tube holding wall portion (154) is formed in a flat shape, which is orthogonal to

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a longitudinal direction of the tube (112). Calleson further discloses (column 5, lines 37-49) that the first and second separated bodies are fixed by a brazing material. Regarding claim 6, the method of forming the device “wherein the first and second bodies are fixed ..toward the joint projections of the second separated body” is not germane to the issue of patentability of the device itself. “Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the pipe in product-by-by process claim is the same as or obvious from the pipe of the prior art. Therefore, the claim is unpatentable even though the prior pipe was made by a different process.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wijkstrom et al. (US 5,836,384) discloses a heat exchanger tank for assembly in a heat exchanger.

Wijkstrom (US 5,816,321) discloses a heat exchanger tank to be mounted in a heat exchanger.

Baba (US 5,896,923) discloses a heat exchanger having a downsized header tank.

Kado (US 5,236,042) discloses a heat exchanger and method of making the same.


Koyama et al. (US 6,234,238) discloses an aluminum alloy heat exchanger.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennet can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tho v Duong
Examiner
Art Unit 3743

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TD
December 28, 2004